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TITLE: Underrun guard for trucks.

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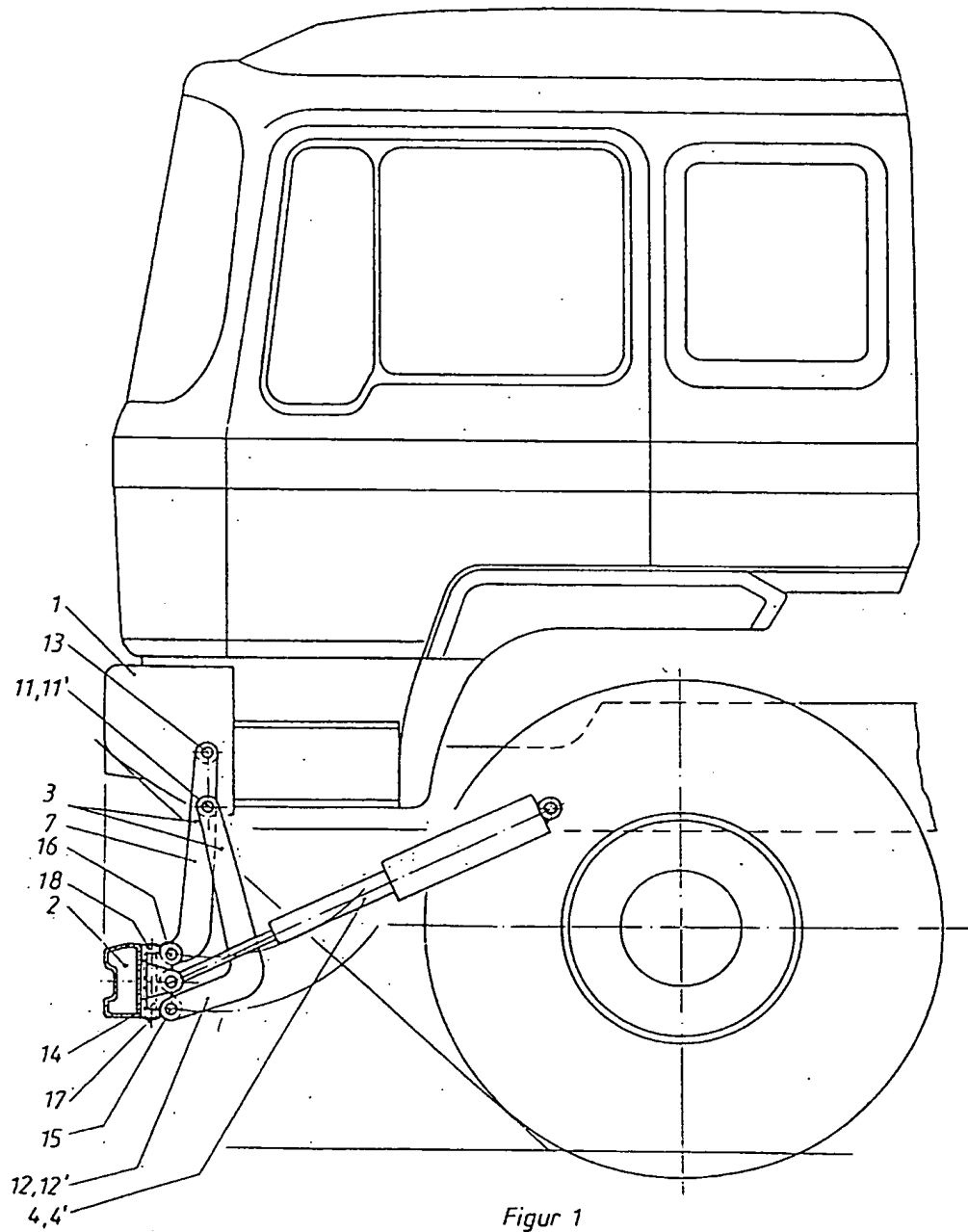
US-CL-CURRENT: 293/102

ABSTRACT:

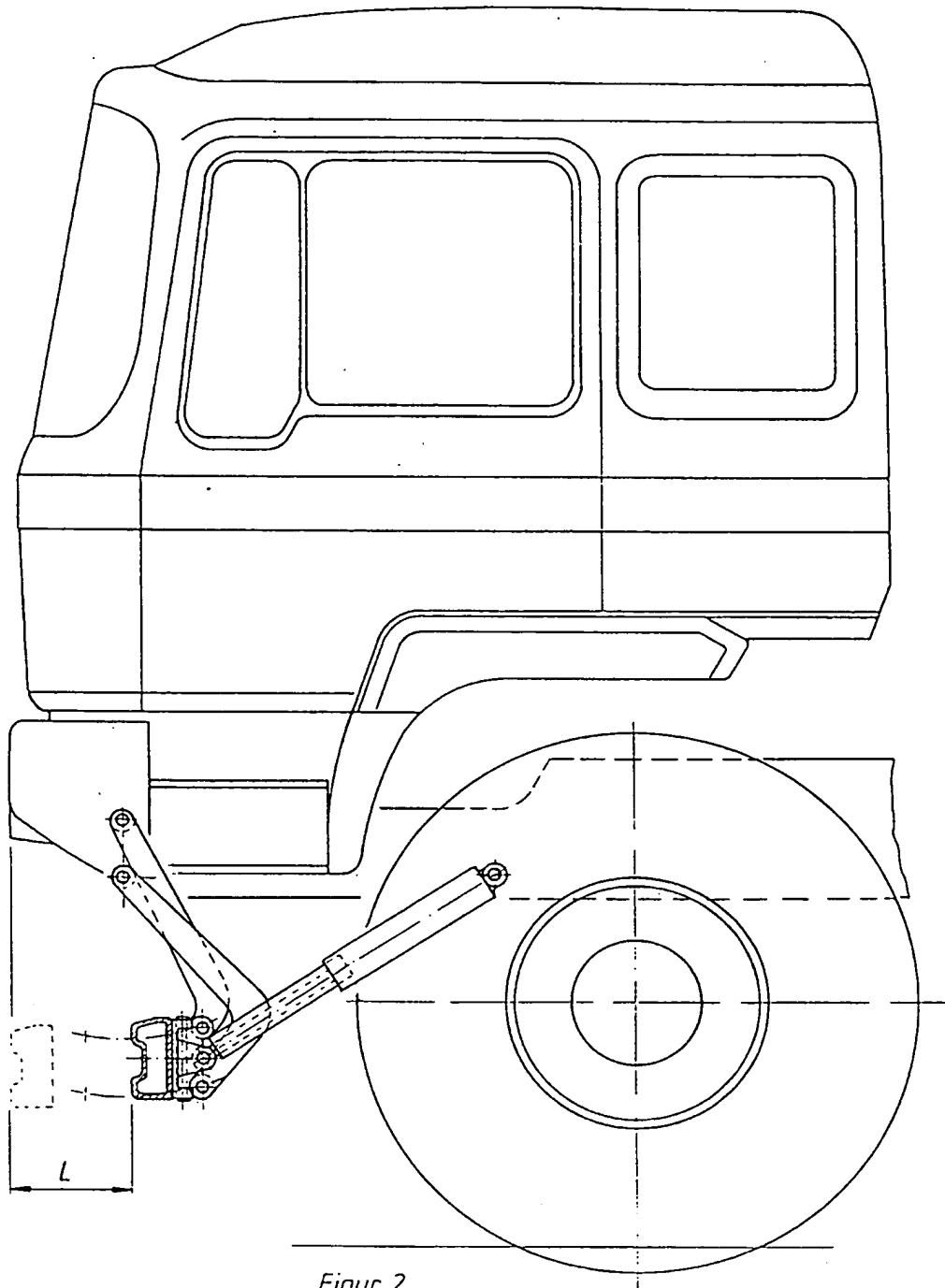
The invention exhibits a collision device for utility vehicles, especially lorries, having an upper bumper (1) for collisions with lorries and an underrun guard (2) arranged below the latter for collisions with cars and to protect pedestrians, the underrun guard (2) being designed so as to dissipate energy and/or deflect force and to be pivotable into a higher position in the direction of the inside of the vehicle. A 4-bar coupling mechanism

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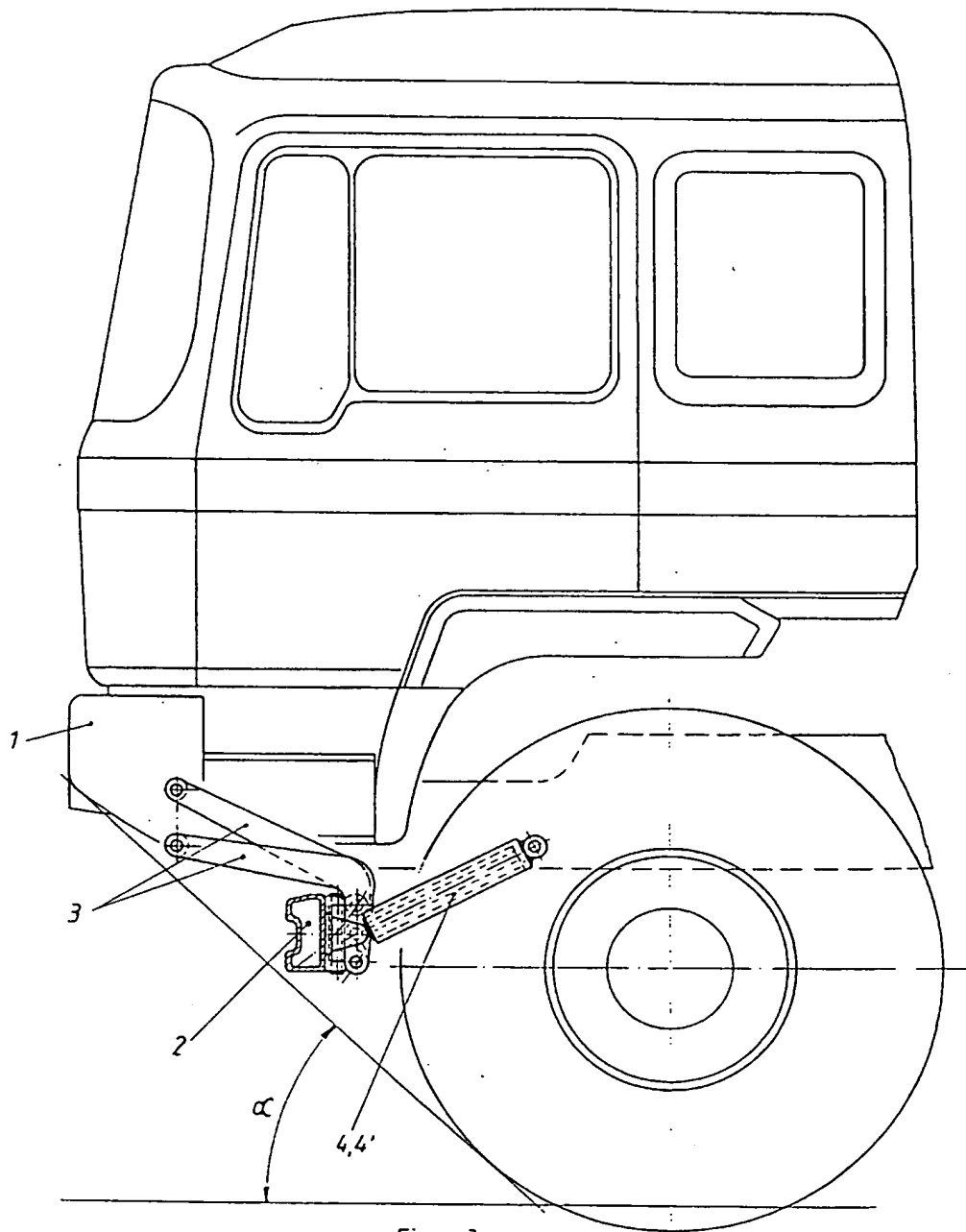
(3) which  
does not have the shape of a parallelogram is provided as a vertical  
adjustment  
mechanism. In the event of a collision, the underrun guard is  
guided, while  
absorbing the collision energy, over a distance L, which  
approximately  
corresponds to the collapsible zone of a car, on a virtually  
horizontal path  
and can subsequently be moved on a short horizontal path into a  
higher final  
position. <IMAGE>



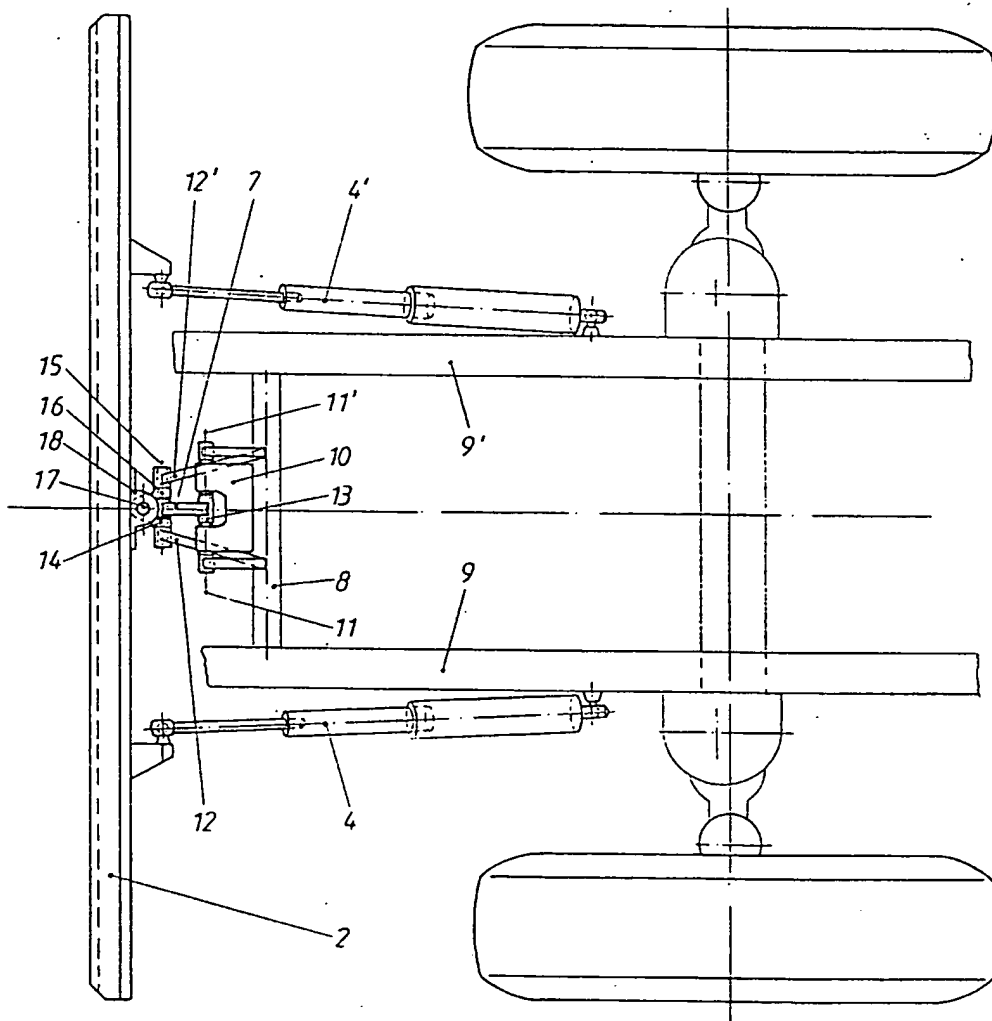
Figur 1



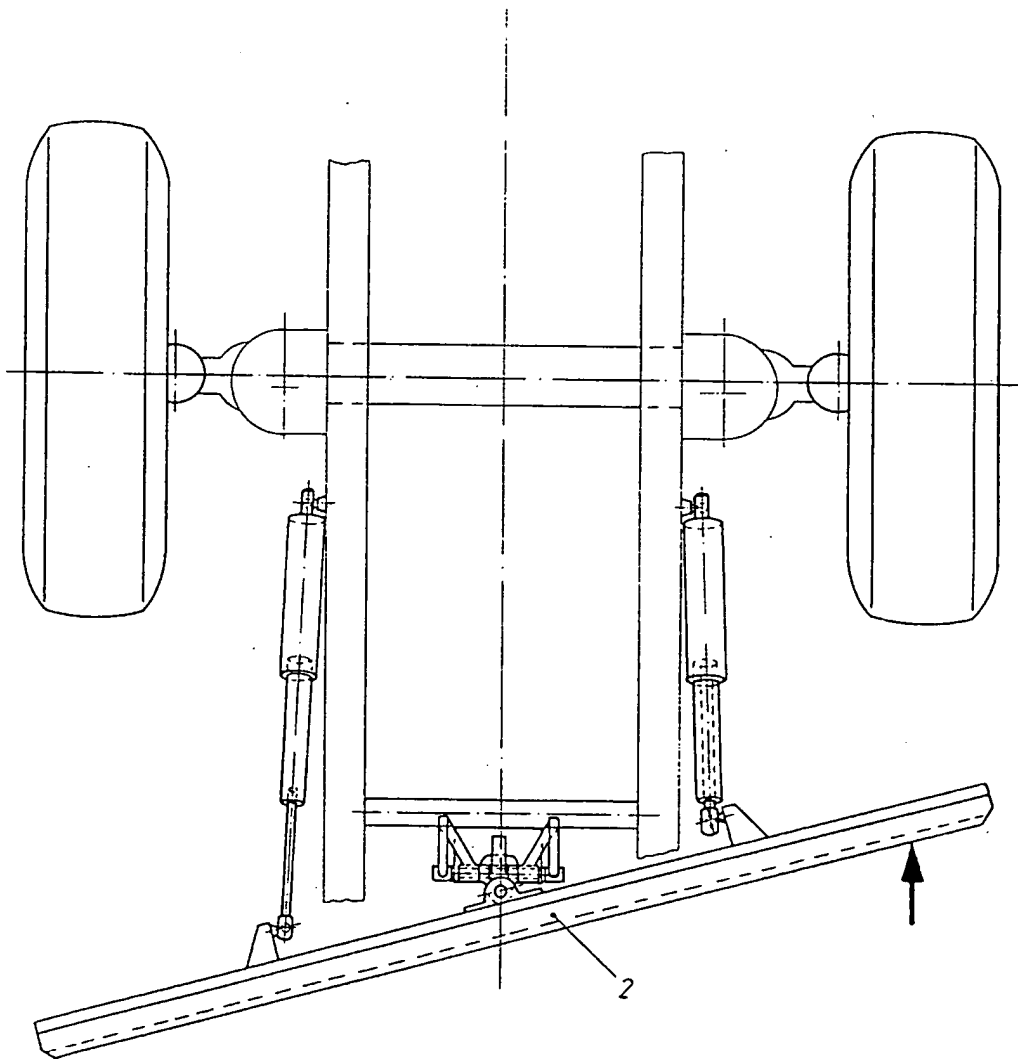
Figur 2



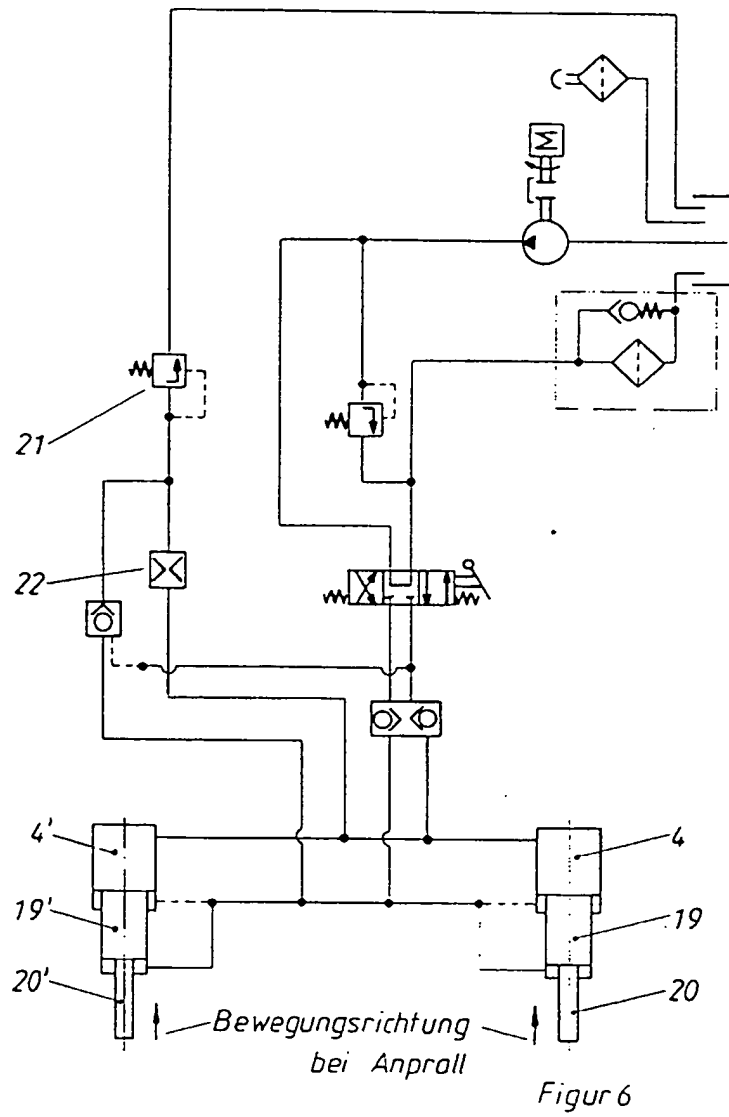
Figur 3



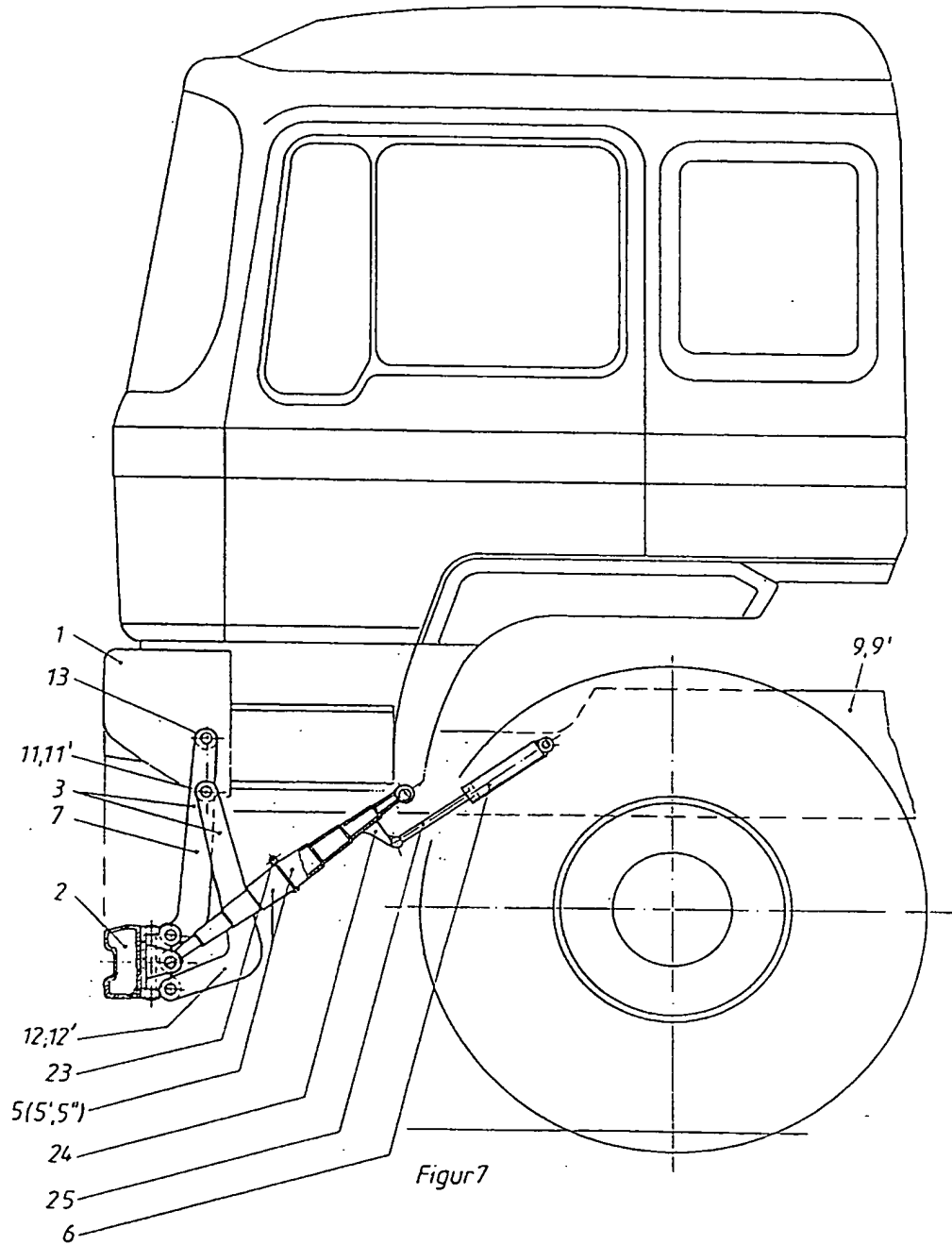
Figur 4

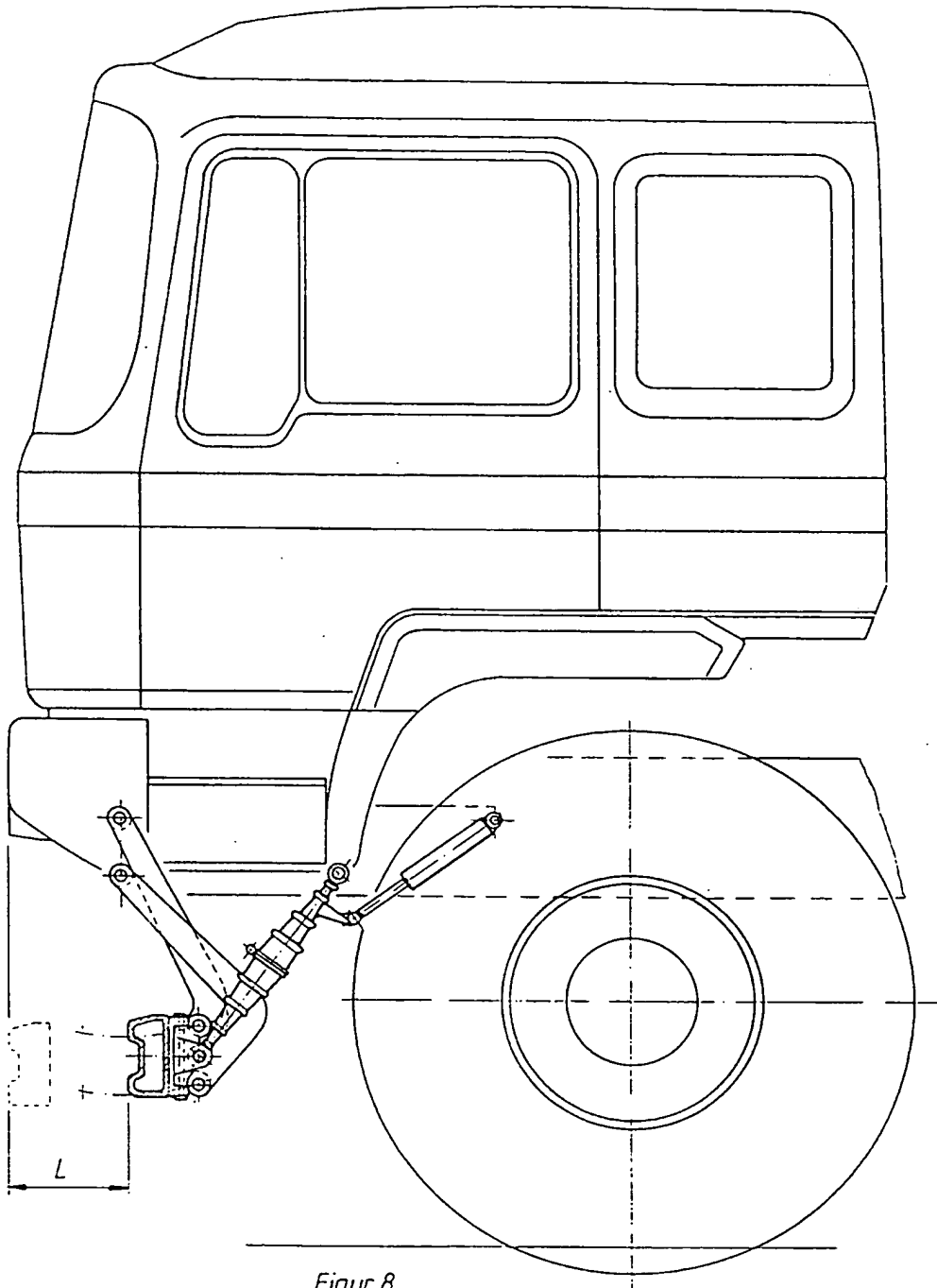


Figur 5

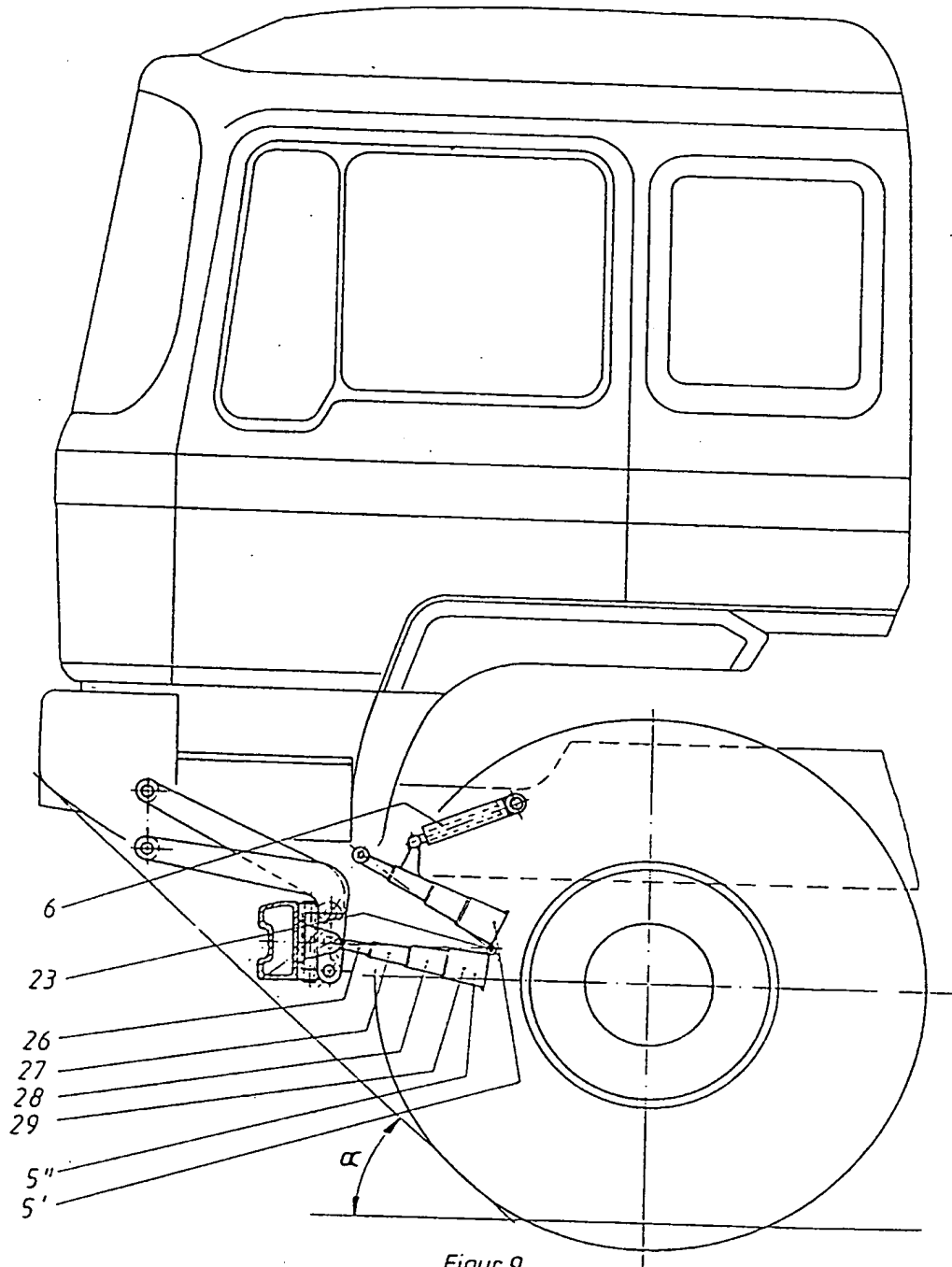




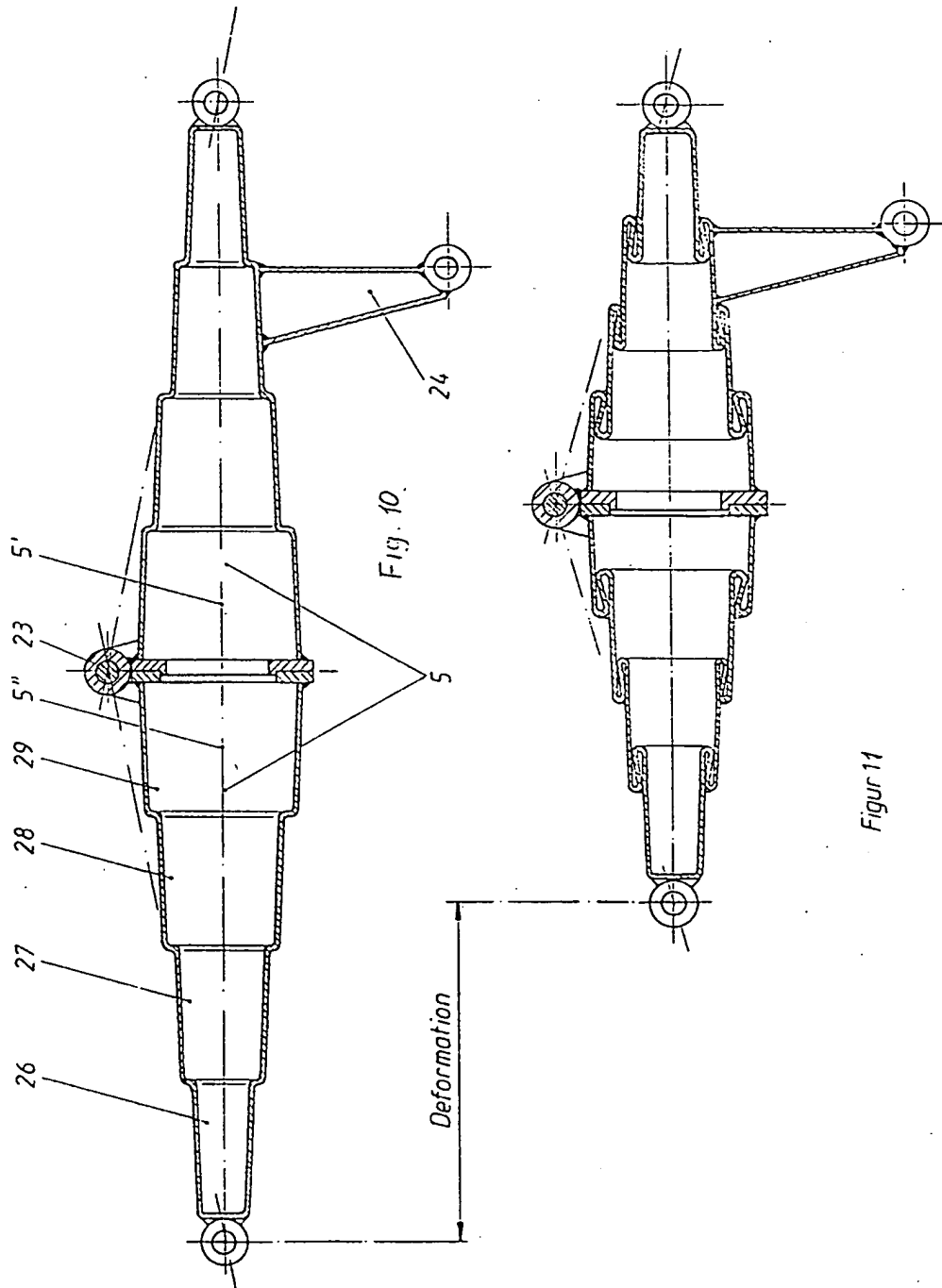




Figur 8



Figur 9





Europäisches  
Patentamt

# EUROPÄISCHER RECHERCHENBERICHT

Nummer der Anmeldung

EINSCHLÄGIGE DOKUMENTE			EP 93101353.6
Kategorie	Kennzeichnung des Dokuments mit Angabe, soweit erforderlich, der maßgeblichen Teile	Betrifft Anspruch	KLASSIFIKATION DER ANMELDUNG (Int. Cl.)
Y	GB - A - 2 090 204 (METALAIR) * Fig. 1 *	1	B 60 R 19/56
D, Y	DE - A - 2 843 670 (DAIMLER-BENZ) * Fig. 1 *	1, 2	
Y	DE - A - 1 931 844 (TOKYO SHARYO) * Fig. 4 *	2	
A	DE - A - 2 438 828 (ROAD RESEARCH) * Fig. 1, 2, 5 *	1	
A	US - A - 4 105 237 (VIALI) * Fig. 1, 3 *	1	
D, A	DE - A - 3 808 813 (MAN) * Fig. 3 *	1	RECHERCHIERTE SACHGEBIETE (Int. Cl.)
D, A	DE - A - 3 808 812 (MAN) * Fig. 5 *	1	B 60 R
Der vorliegende Recherchenbericht wurde für alle Patentansprüche erstellt.			
Recherchenort WIEN		Abschlußdatum der Recherche 30-04-1993	Prüfer PANGRATZ
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